

What is claimed is:

1. A method for modeling cable loss for a cable plant, the method comprising:
 - identifying a service to be provided over the cable plant;
 - selectively entering a value corresponding to at least one parameter of the cable plant; and
 - on entering values, determining and displaying the estimated cable loss for the cable plant providing the service based on the entered values and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant.
2. The method of claim 1, wherein determining the estimated cable loss comprises calculating the cable loss based on the entered values.
3. The method of claim 1, wherein displaying the estimated cable loss comprises comparing the estimated cable loss with a threshold value and using a first color when displaying the estimated cable loss above the threshold and a second color when displaying the estimated cable loss below the threshold.
4. The method of claim 1, wherein determining the estimated cable loss comprises:
 - calculating a first cable loss based on cable gage and cable length for each span;
 - calculating a second cable loss associated with at least one bridge tap based on at least one of bridge tap placement and length;
 - calculating a third cable loss associated with changes in gage between cables in the cable plant; and
 - adding the first, second and third cable losses.
5. The method of claim 4, wherein calculating the second cable loss comprises:
 - determining entered length and placement values for the bridge tap; and
 - calculating the second cable loss using a formula based on at least one of length and placement of the bridge tap.

6. The method of claim 4, wherein calculating the second cable loss comprises:
for bridge taps of greater than a selected length, calculating a cable loss based solely on the position of the bridge tap; and
for bridge taps less than the selected length, calculating a cable loss based on the location and length of the bridge tap.
7. The method of claim 4, wherein calculating the second cable loss comprises assigning a fixed cable loss for a bridge tap of unknown position.
8. The method of claim 4, wherein calculating the third cable loss comprises assigning a cable loss value equal to the number of gage changes times a selected cable loss.
9. A method for modeling cable loss for a cable plant, the method comprising:
identifying a service to be provided over the cable plant;
selectively entering a first set of values corresponding to the cable spans of the cable plant;
selectively entering a second set of values corresponding to the bridge taps of the cable plant; and
on entering each one of the first and second set of values, calculating component loss values for one of the cable spans and the bridge taps;
combining the component loss values for the cable spans and the bridge taps to generate an estimated cable loss; and
displaying the estimated cable loss for the cable plant providing the service based on the entered values and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant.
10. The method of claim 9, wherein identifying a service comprises identifying at least one of HDSL2 and HDSL4.

11. The method of claim 9, wherein displaying the estimated cable loss comprises displaying the estimated cable loss on the same screen of a graphical user interface used to selectively enter at least some of the first and second set of values.
12. The method of claim 9, wherein calculating the component loss value for the bridge tap comprises selecting a formula based on the length of the bridge tap.
13. A tool for modeling cable loss for a cable plant, the tool comprising:
 - means for identifying a service to be provided over the cable plant;
 - means for selectively entering a value corresponding to at least one parameter of the cable plant; and
 - means, communicatively coupled to the means for identifying and means for selectively entering, for determining and displaying the estimated cable loss for the cable plant providing the service on entry of the values based on the entered values and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant.
14. A tool for modeling cable loss for a cable plant, the tool comprising:
 - means for identifying a service to be provided over the cable plant;
 - means for selectively entering a first set of values corresponding to the cable spans of the cable plant;
 - means for selectively entering a second set of values corresponding to the bridge taps of the cable plant; and
 - means, communicatively coupled to the means for identifying and the means for selectively entering the first set of values and the means for selectively entering the second set of values, for calculating component loss values for one of the cable spans and the bridge taps on entering each one of the first and second set of values;
 - means, communicatively coupled to the means for calculating, for combining the component loss values for the cable spans and the bridge taps to generate an estimated cable loss; and

means, communicatively coupled to the means for combining, for displaying the estimated cable loss for the cable plant providing the service based on the entered values and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant.

15. A machine readable medium having instructions stored thereon for implementing a method for modeling cable loss for a cable plant, the method comprising:

identifying a service to be provided over the cable plant;
selectively entering a value corresponding to at least one parameter of the cable plant; and

on entering values, determining and displaying the estimated cable loss for the cable plant providing the service based on the entered values and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant.

16. The computer readable medium of claim 15, wherein determining the estimated cable loss comprises calculating the cable loss based on the entered values.

17. The computer readable medium of claim 15, wherein displaying the estimated cable loss comprises comparing the estimated cable loss with a threshold value and using a first color when displaying the estimated cable loss above the threshold and a second color when displaying the estimated cable loss below the threshold.

18. The computer readable medium of claim 15, wherein determining the estimated cable loss comprises:

calculating a first cable loss based on cable gage and cable length for each span;
calculating a second cable loss associated with at least one bridge tap based on at least one of bridge tap placement and length;
calculating a third cable loss associated with changes in gage between cables in the cable plant; and
adding the first, second and third cable losses.

19. The computer readable medium of claim 18, wherein calculating the second cable loss comprises:

determining entered length and placement values for the bridge tap; and
calculating the second cable loss using a formula based on at least one of length and placement of the bridge tap.

20. The computer readable medium of claim 18, wherein calculating the second cable loss comprises:

for bridge taps of greater than a selected length, calculating a cable loss based solely on the position of the bridge tap; and
for bridge taps less than the selected length, calculating a cable loss based on the location and length of the bridge tap.

21. The computer readable medium of claim 18, wherein calculating the second cable loss comprises assigning a fixed cable loss for a bridge tap of unknown position.

22. The computer readable medium of claim 18, wherein calculating the third cable loss comprises assigning a cable loss value equal to the number of gage changes times a selected cable loss.